



ENVIRONMENTAL ENGINEERING, INC

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March 15, 2006

Ms. Darcy Bering
Sonoma County Department of Env. Health
3273 Airway Drive, Suite D
Santa Rosa, California 95403

Subject: SCDHS-EHD Site #00002640
3705 Gravenstein Highway South, Sebastopol, California

Dear Ms. Bering:

Enclosed for your review is a copy of SOMA's "First Quarter 2006 Groundwater Monitoring Report" for the subject property. This report has been uploaded to the State's GeoTracker database.

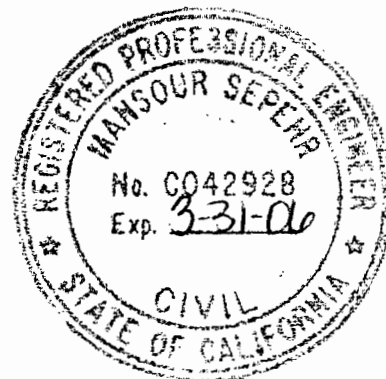
Thank you for your time in reviewing our report. Please do not hesitate to call me at (925) 734-6400, if you have any questions or comments.

Sincerely,

Mansour Sepehr, Ph.D., PE
Principal Hydrogeologist

Enclosure

cc: Mr. Chris Ghanayem w/enclosure





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First Quarter 2006
Groundwater Monitoring Report

Bill's Deli and Market
3705 Gravenstein Highway, South
Sebastopol, California 95472

March 15, 2006

Project 2871

Prepared for
Mr. Chris Ghanayem
3705 Gravenstein Highway, South
Sebastopol, California 95472

Prepared by
SOMA Environmental Engineering, Inc.
6620 Owens Drive, Suite A
Pleasanton, California 94588

Certification

This report has been prepared by SOMA Environmental Engineering, Inc. on behalf of Mr. Chris Ghanayem, the property owner of Bill's Deli and Market, which is located at 3705 Gravenstein Highway South, Sebastopol, California, to comply with the Sonoma County Department of Environmental Health's and California Regional Water Quality Control Board's requirements for the First Quarter 2006 groundwater monitoring event.

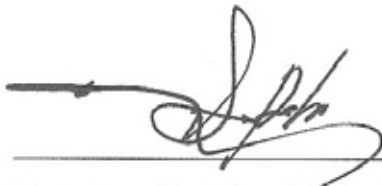

Mansour Sepehr, Ph.D., P.E.
Principal Hydrogeologist

TABLE OF CONTENTS

Certification.....	i
TABLE OF CONTENTS	ii
List of Tables.....	iii
List of Figures	iii
List of Appendices.....	iii
1.0 INTRODUCTION	1
1.1 Previous Activities.....	1
2.0 RESULTS	2
2.1 Field Measurements	2
2.2 Laboratory Analyses.....	2
3.0 CONCLUSIONS & RECOMMENDATIONS.....	3
4.0 REPORT LIMITATIONS	3

List of Tables

- Table 1: Historical Groundwater Elevation Data & Analytical Results: TPH-g, BTEX, & MtBE
- Table 2: Historical Groundwater Analytical Results: Gasoline Oxygenates, Ethanol, Lead Scavengers

List of Figures

- Figure 1: Site vicinity map.
- Figure 2: Site map showing location of groundwater monitoring wells
- Figure 3: Groundwater elevation contour map in feet. February 2006.
- Figure 4: Contour map of MtBE concentrations in the groundwater (EPA Method 8260B). February 2006.

List of Appendices

- Appendix A: SOMA's Groundwater Monitoring Procedures
- Appendix B: Table of Elevations & Coordinates on Monitoring Wells Measured by Harrington Surveys, Inc., and Field Measurements of Physical and Chemical Parameters of Groundwater Samples
- Appendix C: Chain of Custody Form and Laboratory Report for the First Quarter 2006

1.0 INTRODUCTION

This report has been prepared by SOMA Environmental Engineering, Inc. (SOMA) on behalf of Mr. Chris Ghanayem, the property owner of Bill's Deli and Market, which is located at 3705 Gravenstein Highway South, Sebastopol, California ("the Site"), as shown in Figure 1. The Site is currently an active gasoline station and convenience market. The Site is located in an area consisting primarily of small commercial and rural residential properties.

This report summarizes the results of the First Quarter 2006 groundwater monitoring event conducted at the Site on February 15 and 16, 2006. Included in this report are the physical and chemical properties measured in the field for each groundwater sample. The physical and chemical properties consisted of measurements of pH, temperature, and electrical conductivity (EC). This report also includes laboratory analytical results on the groundwater samples.

These activities were performed in accordance with the general guidelines of the Sonoma County Department of Environmental Health and the California Regional Water Quality Control Board (CRWQCB). Appendix A details the groundwater monitoring procedures used during this monitoring event.

1.1 Previous Activities

In March 1997, DHS Contractors and Touchstone Development removed three 10,000-gallon gasoline single-walled steel underground storage tanks (USTs) from the Site. Product lines and the pump island were also removed during the tank removal activities. Soil samples were collected from the excavation pits. Sonoma County Public Health Department official John Anderson was present during these removal and sampling events. The fuel USTs showed no visible holes or damage. Figure 2 shows the locations of the USTs.

The soil and groundwater samples collected from the bottom of the excavated UST cavity, pump island, and product lines were analyzed for total petroleum hydrocarbons as gasoline (TPH-g), benzene, toluene, ethylbenzene, total xylenes (BTEX), Methyl tertiary Butyl Ether (MtBE), and lead. Both TPH-g and MtBE were detected at 160 parts per million in the groundwater sample. MtBE was detected at 190 parts per billion in the soil sample collected from the removed product line adjacent to the pump island.

The Site has been monitored on a quarterly basis since December 2000. Historically, TPH-g and BTEX groundwater constituents have remained below the laboratory reporting limit. MtBE groundwater constituents have either been at non-detectable laboratory levels or near non-detectable laboratory levels.

In March 2004, Jim Glomb Geotechnical and Environmental Consulting of Sebastopol, California installed five additional wells (MW-4 through MW-8) at the Site. Figure 2 shows the locations of the monitoring wells.

On December 20, 2005, SOMA oversaw Gregg Drilling & Testing, Inc. (Gregg) install monitoring well MW-9. Due to the rainy weather and the locations of off-site wells MW-10 and MW-11, the installation of these wells was conducted on January 26, 2006. On February 3, 2006, SOMA developed wells MW-9 to MW-11. On February 22, 2006, Harrington Surveys Inc. (Harrington) horizontally and vertically surveyed the wells in accordance with coordinate values based on the California Coordinate System (NAD-83 and NGVD-88). Harrington's report is included in Appendix B.

2.0 RESULTS

The following sections provide the results of the field measurements and laboratory analyses for the February 15 and 16, 2006 groundwater monitoring event. During this event, well MW-1 was monitored; this well had previously been inaccessible due to construction activities.

2.1 Field Measurements

Table 1 presents the calculated groundwater elevations, as well as the depths to groundwater for each monitoring well. Depths to groundwater ranged from 1.60 feet in well MW-7 to 7.60 feet in well MW-11. The corresponding groundwater elevations ranged from 90.57 feet in well MW-11 to 102.54 feet in wells MW-4.

Figure 3 displays the contour map of groundwater elevations. The groundwater flow direction remained south to southwesterly across the Site, however, the gradient increased to 0.074 feet/feet.

The field measurements taken during this monitoring event are shown in Appendix B.

Refer to Table 1 for further historical groundwater elevation trends. Since this was the first time wells MW-9 to MW-11 were monitored, further events will aid in establishing a more detailed groundwater elevation trend at these locations.

2.2 Laboratory Analyses

Based on the approval of the Sonoma County Department of Environmental Health Division, in a letter dated October 25, 2005, the only required constituent for analytical testing is MtBE during the quarterly monitoring events, with the exception of TBA in well MW-8. Therefore, gasoline oxygenates were further tested on well MW-8. Gasoline oxygenates were also tested on newly installed

off-site wells MW-9 to MW-11 to establish a concentration trend pattern at these locations.

MtBE was below the laboratory reporting limit in the groundwater samples collected from wells MW-1, MW-4, MW-5, MW-6, MW-10, and MW-11. Detectable MtBE concentrations ranged from 0.55 ug/L in well MW-9 to 31 ug/L in well MW-8. Figure 4 displays the contour map of MtBE concentrations in the groundwater.

All gasoline oxygenates were below the laboratory reporting limit in tested wells MW-8 to MW-11. Appendix C shows the groundwater laboratory report for the First Quarter 2006 monitoring event. Tables 1 and 2 show the historical groundwater analytical data for the quarterly monitoring events. As mentioned earlier, since this was the first time wells MW-9 to MW-11 were sampled, further events will aid in establishing a more detailed groundwater concentration trend at these locations.

3.0 CONCLUSIONS & RECOMMENDATIONS

The findings of the First Quarter 2006 groundwater monitoring event can be summarized as follows:

- The groundwater flow direction still remains south to southwesterly across the Site.
- MtBE has remained at trace concentrations or below the laboratory reporting limit throughout the Site.
- Based on the analytical results, both MtBE and gasoline oxygenates have not migrated to the newly installed off-site wells MW-10 and MW-11, and only a trace MtBE concentration was detected in well MW-9.

4.0 REPORT LIMITATIONS

This report is the summary of work done by SOMA, including observations and descriptions of the Site's conditions. It includes the analytical results produced by Pacific Analytical Laboratory for the current groundwater monitoring event. The number and location of the wells were selected to provide the required information, but may not be completely representative of the entire site's conditions. All conclusions and recommendations are based on the results of the laboratory analysis. Conclusions beyond those specifically stated in this document should not be inferred from this report.

SOMA warrants that the services provided were done in accordance with the generally accepted practices in the environmental engineering and consulting field at the time of this sampling.

Tables

Table 1
Historical Groundwater Elevation Data & Analytical Results
TPH-g, BTEX, & MtBE
Bill's Deli and Market
3705 Gravenstein Hwy. South, Sebastopol, California

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B (µg/L)
MW-1	Mar-04	101.69	4.30	97.39	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	Nov-04	101.69	NM	NM	NA	NA	NA	NA	NA	NA
	Feb-05	101.69	NM	NM	NA	NA	NA	NA	NA	NA
	May-05	101.69	NM	NM	NA	NA	NA	NA	NA	NA
	Aug-05	101.69	NM	NM	NA	NA	NA	NA	NA	NA
	Nov-05	101.69	NM	NM	NA	NA	NA	NA	NA	NA
	Feb-06	104.32	2.04	102.28	NA	NA	NA	NA	NA	<0.5
MW-2	Mar-04	101.08	2.90	98.18	<50	<0.5	<0.5	<0.5	<1.5	11
	Nov-04	101.08	10.09	90.99	<50	<0.5	<0.5	<0.5	<1	49
	Feb-05	101.08	3.02	98.06	<200	<0.5	<0.5	<0.5	<1.0	12.40
	May-05	101.08	4.00	97.08	<200	<0.5	<0.5	<0.5	<1.0	3.66
	Aug-05	101.08	7.29	93.79	<50	<0.5	<2.0	<0.5	<1.0	1.24
	Nov-05	101.08	9.63	91.45	NA	NA	NA	NA	NA	12
	Feb-06	103.56	2.35	101.21	NA	NA	NA	NA	NA	2.53
MW-3	Mar-04	100.82	3.75	97.07	<50	<0.5	<0.5	<0.5	<1.5	15
	Nov-04	100.82	9.87	90.95	<50	<0.5	<0.5	<0.5	<1	126
	Feb-05	100.82	2.56	98.26	<200	<0.5	<0.5	<0.5	<1.0	4.70
	May-05	100.82	2.92	97.90	<200	<0.5	<0.5	<0.5	<1.0	6.45
	Aug-05	100.82	7.61	93.21	<50	<0.5	<2.0	<0.5	<1.0	9.96
	Nov-05	100.82	9.60	91.22	NA	NA	NA	NA	NA	2.60
	Feb-06	103.22	2.20	101.02	NA	NA	NA	NA	NA	0.86

Table 1
Historical Groundwater Elevation Data & Analytical Results
TPH-g, BTEX, & MtBE
Bill's Deli and Market
3705 Gravenstein Hwy. South, Sebastopol, California

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B (µg/L)
MW-4	Mar-04	102.36	2.75	99.61	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	Nov-04	102.36	11.39	90.97	<50	<0.5	<0.5	<0.5	<1	<0.5
	Feb-05	102.36	2.04	100.32	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	May-05	102.36	3.79	98.57	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	Aug-05	102.36	8.95	93.41	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	Nov-05	102.36	11.08	91.28	NA	NA	NA	NA	NA	<0.5
	Feb-06	104.78	2.24	102.54	NA	NA	NA	NA	NA	<0.5
MW-5	Mar-04	100.60	3.60	97.00	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	Nov-04	100.60	NM	NM	NA	NA	NA	NA	NA	NA
	Feb-05	100.60	3.46	97.14	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	May-05	100.60	3.75	96.85	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	Aug-05	100.60	4.69	95.91	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	Nov-05	100.60	9.46	91.14	NA	NA	NA	NA	NA	<0.5
	Feb-06	102.98	2.31	100.67	NA	NA	NA	NA	NA	<0.5
MW-6	Mar-04	99.72	3.85	95.87	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	Nov-04	99.72	8.76	90.96	<50	<0.5	<0.5	<0.5	<1	<0.5
	Feb-05	99.72	1.93	97.79	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	May-05	99.72	2.77	96.95	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	Aug-05	99.72	6.15	93.57	<50	<0.5	<2.0	<0.5	<1.0	<0.5
	Nov-05	99.72	8.58	91.14	NA	NA	NA	NA	NA	<0.5
	Feb-06	102.16	1.92	100.24	NA	NA	NA	NA	NA	<0.5

Table 1
Historical Groundwater Elevation Data & Analytical Results
TPH-g, BTEX, & MtBE
Bill's Deli and Market
3705 Gravenstein Hwy. South, Sebastopol, California

Monitoring Well	Date	Casing Elevation ¹ (feet)	Depth to Groundwater (feet)	Groundwater Elevation (feet)	TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-Benzene (µg/L)	Total Xylenes (µg/L)	MtBE 8260B (µg/L)
MW-7	Mar-04	99.30	4.10	95.20	<50	<0.5	<0.5	<0.5	<1.5	<1.0
	Nov-04	99.30	8.35	90.95	<50	<0.5	<0.5	<0.5	<1	4.8
	Feb-05	99.30	2.09	97.21	<200	<0.5	<0.5	<0.5	<1.0	0.86
	May-05	99.30	2.40	96.90	<200	<0.5	<0.5	<0.5	<1.0	<0.5
	Aug-05	99.30	6.39	92.91	<50	<0.5	<2.0	<0.5	<1.0	1.31
	Nov-05	99.30	8.41	90.89	NA	NA	NA	NA	NA	2.35
	Feb-06	101.86	1.60	100.26	NA	NA	NA	NA	NA	0.75
MW-8	Mar-04	98.78	3.20	95.58	<50	<0.5	<0.5	<0.5	<1.5	44
	Nov-04	98.78	6.44	92.34	<50	<0.5	<0.5	<0.5	<1	59
	Feb-05	98.78	2.53	96.25	<200	<0.5	<0.5	<0.5	<1.0	69
	May-05	98.78	3.24	95.54	<200	<0.5	<0.5	<0.5	<1.0	61.8
	Aug-05	98.78	6.42	92.36	<50	<0.5	<2.0	<0.5	<1.0	38
	Nov-05	98.78	6.32	92.46	NA	NA	NA	NA	NA	38.6
	Feb-06	101.23	2.21	99.02	NA	NA	NA	NA	NA	31
MW-9	Feb-06	100.76	7.40	93.36	NA	NA	NA	NA	NA	0.55
MW-10	Feb-06	98.95	3.95	95.00	NA	NA	NA	NA	NA	<0.5
MW-11	Feb-06	98.17	7.60	90.57	NA	NA	NA	NA	NA	<0.5

Notes:

The first time SOMA monitored this site was in the Fourth Quarter 2004.

The first time SOMA monitored wells off-site wells MW-9 to MW-11 was in the First Quarter 2006.

Wells MW-9 to MW-11 were installed by SOMA in December 2005.

1. All site wells resurveyed by Harrington Surveys, Inc in February 2006.

NA: Not Analyzed. well MW-1 was buried due to construction activities, and MW-5 was inaccessible due to blockage at 5 feet bgs.

NM: Not Measured.

By request of Sonoma County Department of Health Services only MtBE was required in the Fourth Quarter 2005.

Table 2
Historical Groundwater Analytical Results
Gasoline Oxygenates, Ethanol, Lead Scavengers
Bill's Deli and Market
3705 Gravenstein Hwy. South, Sebastopol, California

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-1	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	NA	NA	NA	NA	NA	NA	NA
	Feb-05	NA	NA	NA	NA	NA	NA	NA
	May-05	NA	NA	NA	NA	NA	NA	NA
	Aug-05	NA	NA	NA	NA	NA	NA	NA
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA
MW-2	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	<2.5	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA
MW-3	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	<2.5	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA
MW-4	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	<2.5	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA

Table 2
Historical Groundwater Analytical Results
Gasoline Oxygenates, Ethanol, Lead Scavengers
Bill's Deli and Market
3705 Gravenstein Hwy. South, Sebastopol, California

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-5	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	NA	NA	NA	NA	NA	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA
MW-6	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	<2.5	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA
MW-7	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	<2.5	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	<10	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	NA	NA	NA	NA	NA	NA	NA
	Feb-06	NA	NA	NA	NA	NA	NA	NA
MW-8	Mar-04	<25	<1.0	<1.0	<1.0	NA	NA	NA
	Nov-04	<2.5	<0.5	<0.5	<0.5	<1000	<0.5	<0.5
	Feb-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	May-05	<2.5	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Aug-05	11.60	<0.5	<0.5	<2.0	<1000	<0.5	<0.5
	Nov-05	<10	NA	NA	NA	NA	NA	NA
	Feb-06	<10	<0.5	<0.5	<2.0	NA	<0.5	<0.5

Table 2
Historical Groundwater Analytical Results
Gasoline Oxygenates, Ethanol, Lead Scavengers
Bill's Deli and Market
3705 Gravenstein Hwy. South, Sebastopol, California

Monitoring Well	Date	TBA (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	Ethanol (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-9	Feb-06	<10	<0.5	<0.5	<2.0	NA	<0.5	<0.5
MW-10	Feb-06	<10	<0.5	<0.5	<2.0	NA	<0.5	<0.5
MW-11	Feb-06	<10	<0.5	<0.5	<2.0	NA	<0.5	<0.5

Notes:

The first time SOMA monitored this site was in the Fourth Quarter 2004.

The first time SOMA monitored wells off-site wells MW-9 to MW-11 was in the First Quarter 2006.

Wells MW-9 to MW-11 were installed by SOMA in December 2005.

NA: Not Analyzed. well MW-1 was buried due to construction activities
and well MW-5 was inaccessible, due to blockage in well at 5 feet bgs

Gasoline Oxygenates

TBA: tertiary Butyl Alcohol

DIPE: Diisopropyl Ether

ETBE: Ethyl tertiary Butyl Ether

TAME: Methyl tertiary Amyl Ether

Alcohols

Ethanol

Methanol Tested for in Fourth Quarter 2004, see Monitoring Report for results.

Lead Scavengers

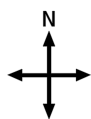
1,2-DCA: 1,2-Dichloroethane

EDB: 1,2-Dibromoethane

By request of Sonoma County Department of Health Services,

TBA was required in only the sample collected from well MW-8 in the Fourth Quarter 2005.

Figures



approximate scale in feet
0 70 140

Figure 1: Site vicinity map.

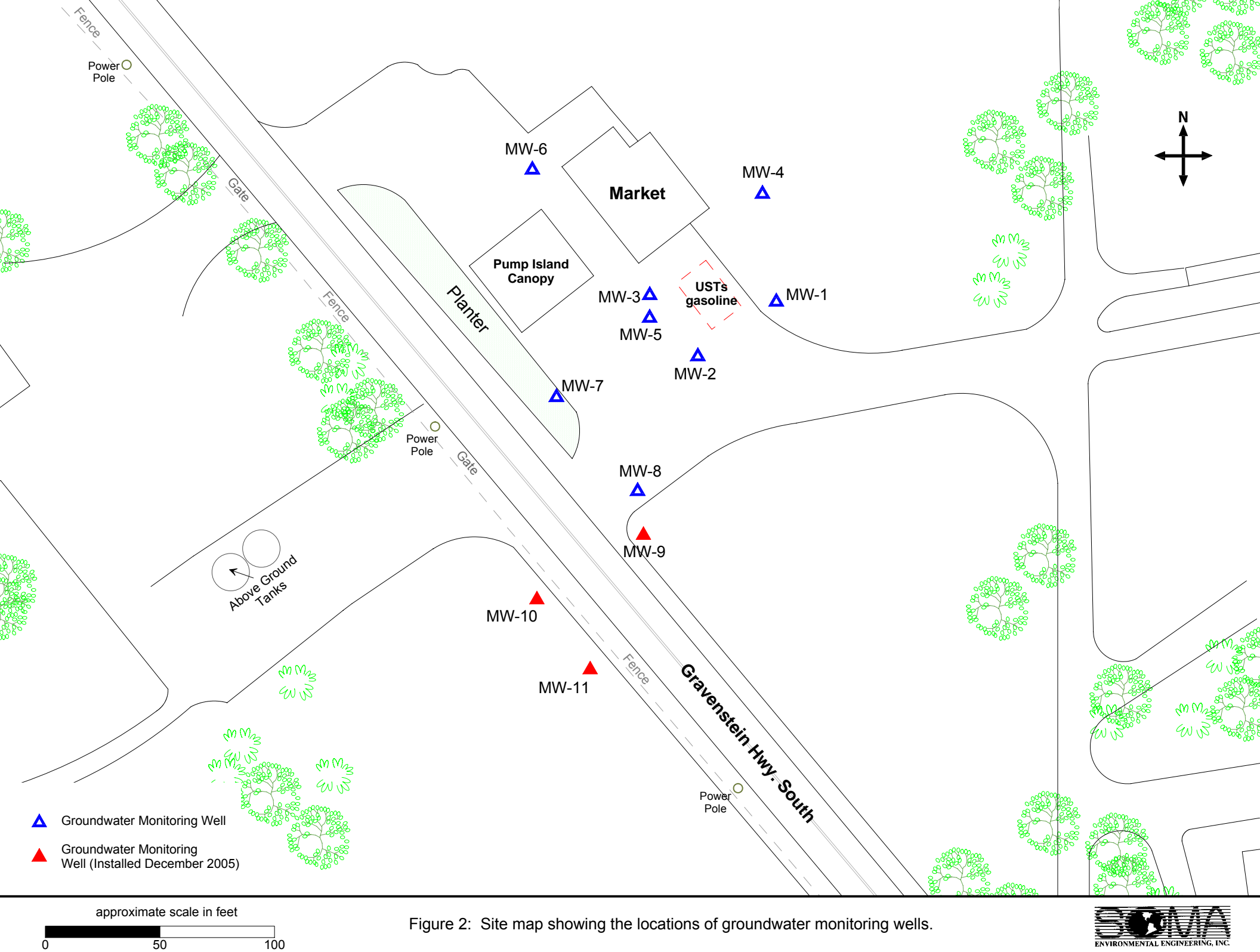


Figure 2: Site map showing the locations of groundwater monitoring wells.

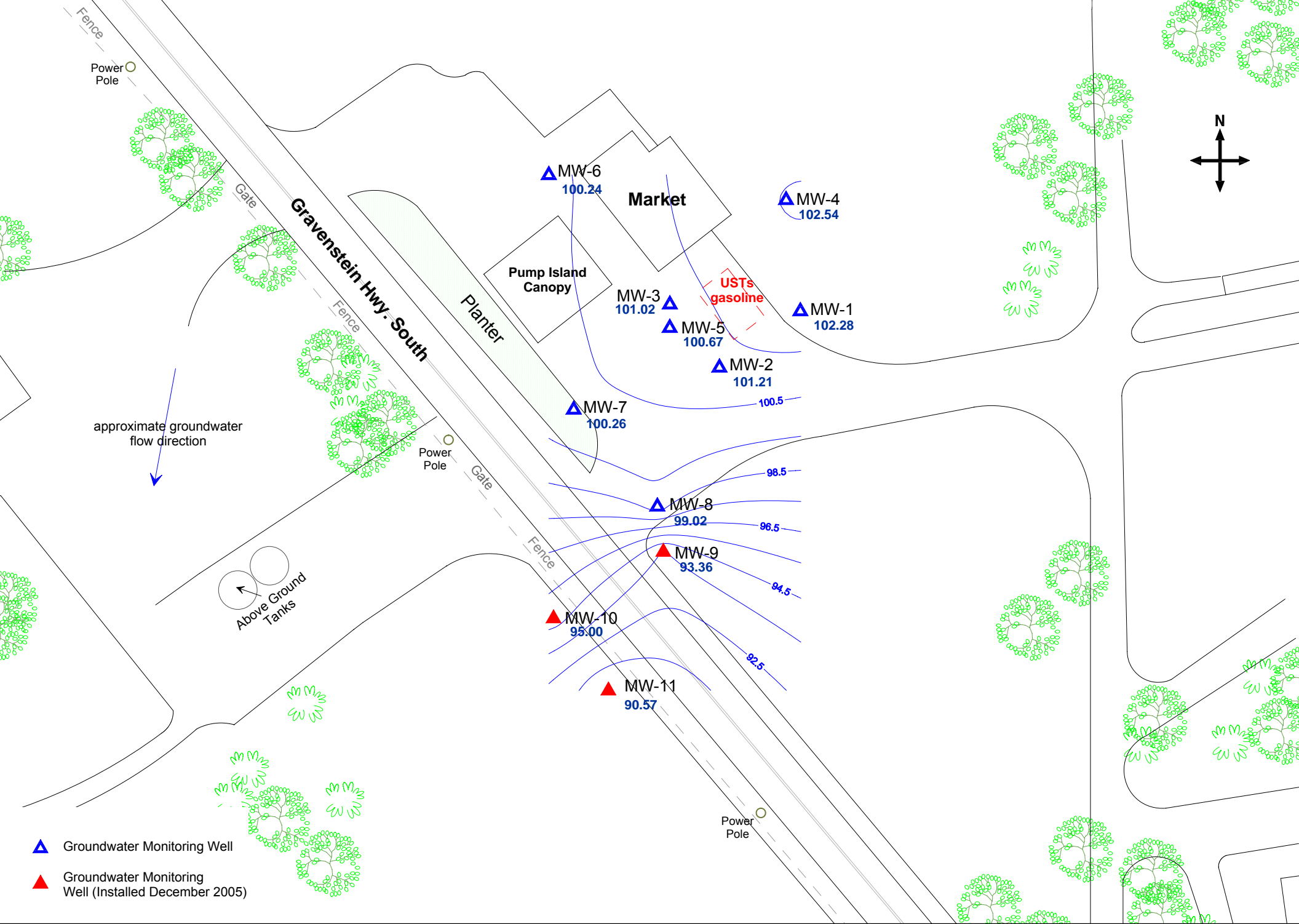


Figure 3: Groundwater elevation contour map in feet. February 2006.

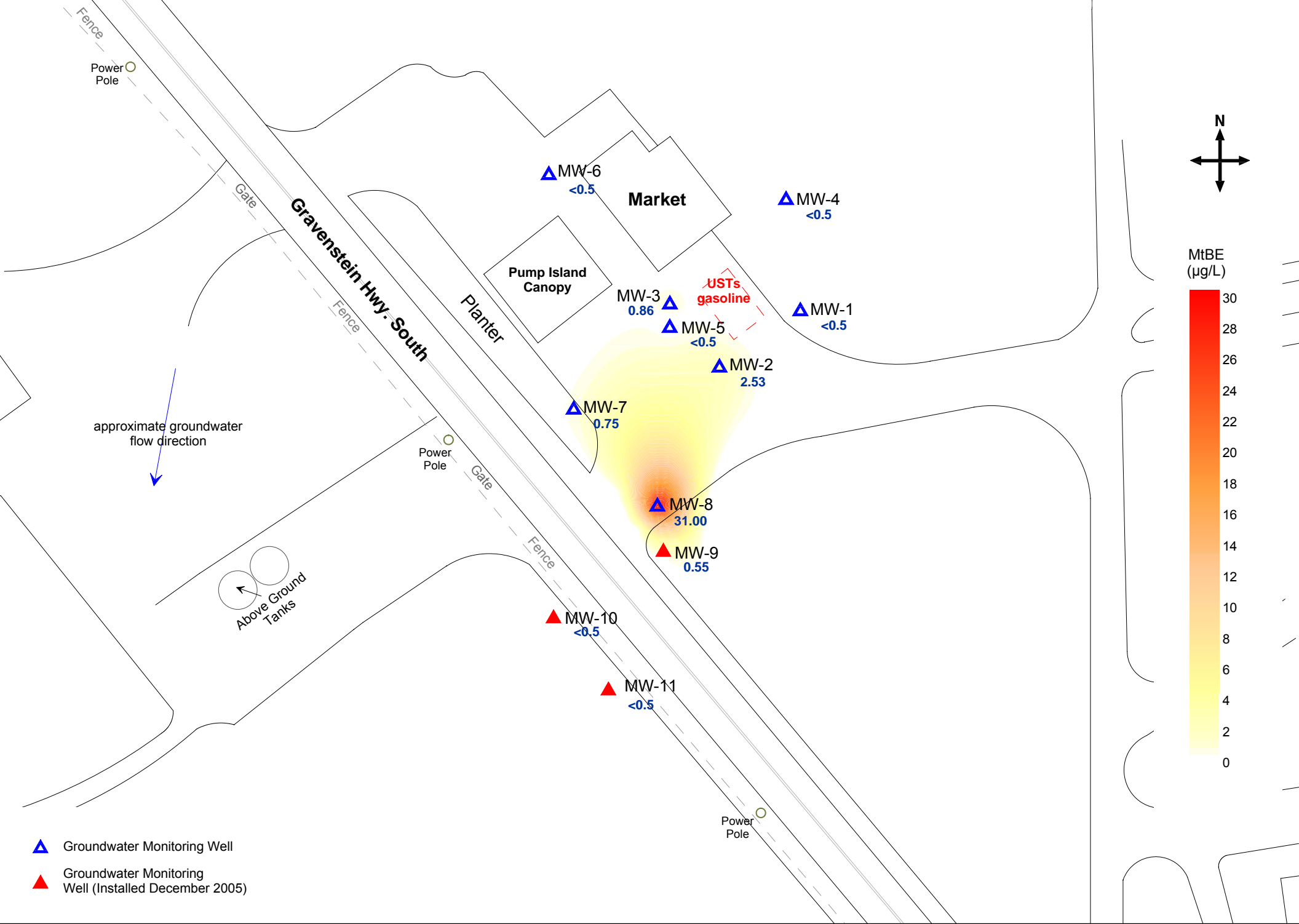


Figure 4: Contour map of MtBE concentrations in the groundwater (EPA Method 8260B). February 2006.

Appendix A

SOMA's Groundwater Monitoring Procedures

Field Activities

On February 15 and 16, 2006, SOMA's field crew conducted a groundwater monitoring event in accordance with the procedures and guidelines of the SCDEH and the CRWQCB. During this event, eleven wells (MW-1 to MW-11) were monitored.

The depth to groundwater in each on-site monitoring well was measured from the top of the casing to the nearest 0.01 foot using an electric sounder. Harrington Surveys Inc. of Walnut Creek surveyed the Site, on February 22, 2006. The survey datum was based on California Coordinate System, Zone 2, NAD 83. The elevation data was based on a datum of 141.99 feet NGVD88. Top of casing elevation data and the depth to groundwater in each monitoring well was used to calculate the groundwater elevation. The survey data is included in Appendix B.

Prior to collecting groundwater samples, wells (MW-1 to MW-8) were purged by using a battery operated 2-inch diameter pump (Model ES-60 DC). Due to the locations of the offsite wells (MW-10 and MW-11), in a field adjacent to the site, purging was performed using a disposable polyethylene bailer. A bailer was also used for purging well MW-9.

During the purging of the wells, in order to ensure that the final samples were in equilibrium with (and representative of) the surrounding groundwater, several samples were taken for field measurements of pH, temperature and electrical conductivity (EC). The field measurements were tested using a Hanna pH, conductivity, and temperature meter. The equipment was calibrated at the Site using standard solutions and procedures provided by the manufacturer. Appendix B details the field measurements taken during the First Quarter 2006 monitoring event.

The purging continued until these parameters stabilized or three casing volumes were purged. After purging, a disposable polyethylene bailer was used to collect sufficient samples from each monitoring well for laboratory analyses. The groundwater sample was transferred to three 40-mL VOA vials and preserved with hydrochloric acid. The vials were then sealed to prevent the development of air bubbles within the headspace.

After the groundwater samples were collected they were placed on ice in an ice chest and maintained at 4⁰C. A chain of custody (COC) form was written for all the samples. After the sampling was completed, on February 16, 2006, SOMA's field crew delivered the groundwater samples along with the COC form to Pacific Analytical Laboratory, in Alameda, California.

Laboratory Analysis

Pacific Analytical Laboratory, in Alameda, California, a state-certified laboratory, analyzed all of the groundwater samples for MtBE, and gasoline oxygenates for wells (MW-8 to MW-11). All referenced constituents were analyzed using EPA Method 8260B.

Appendix B

Table of Elevations & Coordinates on Monitoring Wells
Measured by Harrington Surveys, Inc.,
and
Field Measurements of Physical and Chemical
Parameters of Groundwater Samples

Harrington Surveys Inc.
Land Surveying & Mapping

2278 Larkey Lane, Walnut Creek, Ca. 94597 Phone (925)935-7228 Fax (925)935-5118
Cell (925)788-7359 E-Mail (ben5132@pacbell.net)

SOMA ENVIRONMENTAL ENGINEERING
6620 OWENS DR. # A
PLEASANTON, CA. 94588

FEB. 22, 2006

ATTN: ELENA

3705 GRAVENSTEIN HWY. S.
SEBASTOPOL CA.

SURVEY REPORT

CONTROLLING POINTS FROM SURVEY BY HARRINGTON SURVEYS INC., DATED 02-22-06

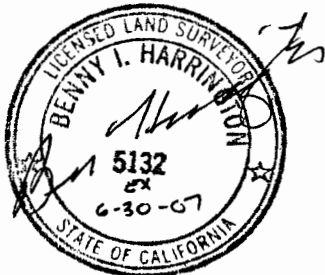
CONTROL PT.# RTCM-Ref 00001, CALIFORNIA COORDINATE SYSTEM, ZONE 2. NAD 83.
NORTH 1,923,182.24 - EAST 6,347,713.99, LAT. N38°26'26.398182" LONG.
W122°44'49.151219".
ELEVATION 141.99, NGVD 88,

CONTROL PT. # BM37 M, CALIFORNIA COORDINATE SYSTEM, ZONE 2, NAD 83.
NORTH 1,908,814.18 - EAST 6,325,739.51 LAT N38°24'02.495544", LONG.
W122°49'23.696136".
ELEVATION 80.79, NGVD 88,

INSTRUMENTATION:
TRIMBLE GPS, MODEL 5800 AND LEICA TCA 1800, 1" HORZ. & VERT.
OBSERVATION: EPOCH = 180.

FIELD SURVEY: FEB. 22, 2006.

BEN HARRINGTON
PLS 5132



3705 GRAVENSTEIN HWY S
SEBASTOPOL, CA.
MONITORING WELLS

HARRINGTON SURVEYS INC.
2278 LARKEY LANE
WALNUT CREEK CA. 94597

JOB # 2626
FEB. 22, 2006

DESCRIPTION	NORTH	EAST	ELEV.	LATITUDE ° ' " N.	LONGITUDE ° ' " W.	LATITUDE DEC. ° N.	LONGITUDE DEC. ° W.
BM37 M	1908814.18	6325739.51	80.79	38 24 2.495544 N	122 49 23.696136 W	38.406932067 N	122.823248927 W
MW 1 NOTCH	1895108.56	6338406.62	104.32	38 21 48.121599 N	122 46 43.105958 W	38.363367111 N	122.778640544 W
MW 1 PAV	1895107.90	6338406.95	104.62	38 21 48.115126 N	122 46 43.101680 W	38.363365313 N	122.761972689 W
MW 1 PUNCH	1895108.72	6338406.51	104.52	38 21 48.123127 N	122 46 43.107264 W	38.363367535 N	122.778640907 W
MW 2 NOTCH	1895082.79	6338370.10	103.56	38 21 47.863738 N	122 46 43.561694 W	38.363295483 N	122.778767137 W
MW 2 PAV	1895083.51	6338370.11	103.72	38 21 47.870913 N	122 46 43.561599 W	38.363297476 N	122.778767111 W
MW 2 PUNCH	1895082.94	6338369.77	103.71	38 21 47.865221 N	122 46 43.565746 W	38.363295895 N	122.778768263 W
MW 3 NOTCH	1895110.21	6338351.89	103.22	38 21 48.133241 N	122 46 43.793237 W	38.363370345 N	122.778831455 W
MW 3 PAV	1895110.38	6338351.59	103.48	38 21 48.134958 N	122 46 43.797017 W	38.363370822 N	122.778832505 W
MW 3 PUNCH	1895110.37	6338351.77	103.49	38 21 48.134865 N	122 46 43.794709 W	38.363370796 N	122.778831864 W
MW 4 NOTCH	1895155.10	6338400.94	104.78	38 21 48.581128 N	122 46 43.182262 W	38.363494758 N	122.778661739 W
MW 4 PAV	1895154.46	6338400.78	104.97	38 21 48.574778 N	122 46 43.184230 W	38.363492994 N	122.778662286 W
MW 4 PUNCH	1895155.31	6338400.84	105.02	38 21 48.583234 N	122 46 43.183472 W	38.363495343 N	122.778662076 W
MW 5 NOTCH	1895100.08	6338350.97	102.98	38 21 48.033062 N	122 46 43.803686 W	38.363342517 N	122.778834357 W
MW 5 PAV	1895099.78	6338350.09	103.47	38 21 48.029976 N	122 46 43.814682 W	38.363341660 N	122.778837412 W
MW 5 PUNCH	1895100.23	6338350.73	103.44	38 21 48.034486 N	122 46 43.806679 W	38.363342913 N	122.778835189 W
MW 6 NOTCH	1895166.15	6338293.98	102.16	38 21 48.681278 N	122 46 44.526314 W	38.363522577 N	122.779035087 W
MW 6 PAV	1895165.38	6338294.38	102.45	38 21 48.673746 N	122 46 44.521152 W	38.363520485 N	122.779033653 W
MW 6 PUNCH	1895166.50	6338293.71	102.41	38 21 48.684713 N	122 46 44.529758 W	38.363523531 N	122.779036044 W
MW 7 NOTCH	1895066.22	6338308.09	101.86	38 21 47.694705 N	122 46 44.338438 W	38.363248529 N	122.778982899 W
MW 7 PAV	1895065.57	6338308.29	102.23	38 21 47.688353 N	122 46 44.335838 W	38.363246765 N	122.778982177 W
MW 7 PUNCH	1895066.37	6338307.93	102.14	38 21 47.696173 N	122 46 44.340430 W	38.363248937 N	122.778983453 W
MW 8 NOTCH	1895017.00	6338346.08	101.23	38 21 47.211430 N	122 46 43.856079 W	38.363114286 N	122.778848911 W
MW 8 PAV	1895017.30	6338346.51	101.53	38 21 47.214393 N	122 46 43.850759 W	38.363115109 N	122.778847433 W
MW 8 PUNCH	1895017.22	6338345.88	101.46	38 21 47.213542 N	122 46 43.858669 W	38.363114873 N	122.778849630 W
MW 9 NOTCH	1894997.31	6338349.41	100.76	38 21 47.017098 N	122 46 43.812267 W	38.363060305 N	122.778836741 W
MW 9 PAV	1894996.74	6338350.16	101.06	38 21 47.011531 N	122 46 43.802750 W	38.363058759 N	122.778834097 W
MW 9 PUNCH	1894997.58	6338349.21	101.12	38 21 47.019752 N	122 46 43.814754 W	38.363061042 N	122.778837432 W
MW 10 NOTCH	1894963.64	6338292.64	98.95	38 21 46.679447 N	122 46 44.521269 W	38.362966513 N	122.779033686 W
MW 10 PAV	1894962.90	6338292.78	99.23	38 21 46.672103 N	122 46 44.519462 W	38.362964473 N	122.779033184 W
MW 10 PUNCH	1894964.17	6338292.48	99.31	38 21 46.684632 N	122 46 44.523328 W	38.362967953 N	122.779034258 W
MW 11 NOTCH	1894934.05	6338313.45	98.17	38 21 46.388738 N	122 46 44.256813 W	38.362885761 N	122.778960226 W
MW 11 PAV	1894933.23	6338313.54	98.48	38 21 46.380599 N	122 46 44.255669 W	38.362883500 N	122.778959908 W
MW 11 PUNCH	1894934.42	6338313.23	98.52	38 21 46.392358 N	122 46 44.259710 W	38.362886766 N	122.778961031 W
RTCM-Ref 0001	1923182.24	6347713.99	141.99	38 26 26.398182 N	122 44 49.151219 W	38.440666162 N	122.746986450 W



Well No.: MW-1
 Casing Diameter: 2 inches
 Depth of Well: 24.60 feet
 Top of Casing Elevation: 104.32 feet
 Depth to Groundwater: 2.04 feet
 Groundwater Elevation: 102.28 feet
 Water Column Height: 22.56 feet
 Purged Volume: 12 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 16, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒
 Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____
 Sheen: No ☒ Yes ☐ Describe: _____
 Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(gallons)		(°C)	(µS/cm)
12:55 PM	started purging well			
12:58 PM	3.0	5.22	18.50	239
1:01 PM	7	5.21	17.20	217
1:05 PM	12	5.21	17.00	220
1.06 PM Sample				



Well No.: MW-2
 Casing Diameter: 2 inches
 Depth of Well: 24.70 feet
 Top of Casing Elevation: 103.56 feet
 Depth to Groundwater: 2.35 feet
 Groundwater Elevation: 101.21 feet
 Water Column Height: 22.35 feet
 Purged Volume: 12 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 16, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒
 Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____
 Sheen: No ☒ Yes ☐ Describe: _____
 Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(gallons)		(°C)	(µS/cm)
12:31 PM	Started purging well			
12:33 PM	2.0	5.54	17.20	182
12:36 PM	5.0	5.42	17.90	168
12:39 PM	9	5.41	18.10	173
12:42 PM	12	5.39	18.30	200
12:56 PM	Sampled			



Well No.: MW-3
 Casing Diameter: 2 inches
 Depth of Well: 24.90 feet
 Top of Casing Elevation: 103.22 feet
 Depth to Groundwater: 2.20 feet
 Groundwater Elevation: 101.02 feet
 Water Column Height: 22.70 feet
 Purged Volume: 12 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy. South
 Sebastopol, CA
 Date: February 16, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____

Sheen: No ☒ Yes ☐ Describe: _____

Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(galions)		(°C)	(μS/cm)
11:08 Am	started purging well			
11:11 Am	3	5.75	18.30	138
11:15 Am	7	5.57	17.80	138
11:19 Am	12	5.55	18.10	131
11:20 Am	sampled			



Well No.: MW-4
 Casing Diameter: 2 inches
 Depth of Well: 24.65 feet
 Top of Casing Elevation: 104.78 feet
 Depth to Groundwater: 2.24 feet
 Groundwater Elevation: 102.54 feet
 Water Column Height: 22.41 feet
 Purged Volume: 14 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 16, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____

Sheen: No ☒ Yes ☐ Describe: _____

Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(gallons)		(°C)	(µS/cm)
1:15 PM	started purging well			
1:17 PM	2.0	5.44	17.60	80
1:20 PM	5	5.43	15.50	70
1:24 PM	10	5.38	14.80	64
1:28 PM	14	5.37	14.70	66
1:30 PM	Samples			



Well No.: MW-5
 Casing Diameter: 2 inches
 Depth of Well: 48.72 feet
 Top of Casing Elevation: 102.98 feet
 Depth to Groundwater: 231 feet
 Groundwater Elevation: 100.67 feet
 Water Column Height: 46.41 feet
 Purged Volume: 20 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 16, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____
 Sheen: No ☒ Yes ☐ Describe: _____
 Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(gallons)		(°C)	(µS/cm)
10:32 Am	started purging well			
10:35 Am	4.0	6.10	16.20	306
10:41 Am	10	6.16	18.10	314
10:45 Am	13	DRIED		
10:49 Am	15	6.20	18.40	313
10:55 Am	20	6.18	18.50	307
11:00 Am	Sampled			



Well No.: mw-6
 Casing Diameter: 2 inches
 Depth of Well: 24.45 feet
 Top of Casing Elevation: 102.16 feet
 Depth to Groundwater: 1.92 feet
 Groundwater Elevation: 100.24 feet
 Water Column Height: 22.53 feet
 Purged Volume: 15 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 15, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____

Sheen: No ☒ Yes ☐ Describe: _____

Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Voi	pH	Temp	E.C.
	(gallons)		(°C)	(μS/cm)
2:53 PM	started pumping well			
2:55 PM	3.0	5.66	17.20	99
2:58 PM	6	5.40	16.70	97
3:01 PM	10	5.34	16.30	101
3:04 PM	15	5.32	16.20	100
3:07 PM	sampled			



Well No.: MW-7
 Casing Diameter: 2 inches
 Depth of Well: 24.50 feet
 Top of Casing Elevation: 101.86 feet
 Depth to Groundwater: 1.60 feet
 Groundwater Elevation: 100.26 feet
 Water Column Height: 22.90 feet
 Purged Volume: 17 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 15, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____
 Sheen: No ☒ Yes ☐ Describe: _____
 Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(galions)		(°C)	(µS/cm)
2:25 PM	Startke purging well			
2:27 PM	2.0	5.54	17.10	756
2:30 PM	6.0	5.55	16.50	716
2:32 PM	10	5.42	17.80	775
2:35 PM	14	5.56	18.60	623
2:38 PM	17	5.58	18.90	638
2:40 PM	sampled			



ENVIRONMENTAL ENGINEERING, INC

Well No.: MW-8
Casing Diameter: 2 inches
Depth of Well: 24.50 feet
Top of Casing Elevation: 101.23 feet
Depth to Groundwater: 2.21 feet
Groundwater Elevation: 99.02 feet
Water Column Height: 22.29 feet
Purged Volume: 20 gallons

Project No.: 2871
Address: 3705 Gravenstein Hwy, South
Sebastopol, CA
Date: February 15, 2006
Sampler: Mehran Nowroozi
Tony Perini

Purging Method: Bailer ☐ Pump ☒

Sampling Method: Bailer ☒ Pump ☐

Color: No ☒ Yes ☐ Describe: _____

Sheen: No ☒ Yes ☐ Describe: _____

Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(gallons)		(°C)	(µS/cm)
1:45 PM	started purging well			
1:47 PM	1.5	6.19	15.60	660
1:51 PM	7	5.85	17.10	615
1:54 PM	12	5.91	16.40	608
1:57 PM	16	6.00	17.70	654
2:00 PM	20	5.80	18.20	757
2:02 PM	sampled			



Well No.: MW-9
 Casing Diameter: 2 inches
 Depth of Well: 24.58 feet
 Top of Casing Elevation: 100.76 feet
 Depth to Groundwater: 7.40 feet
 Groundwater Elevation: 93.36 feet
 Water Column Height: 17.15 feet
 Purged Volume: 14 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy. South
 Sebastopol, CA
 Date: February 15, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☒ Pump ☐

Sampling Method: Bailer ☐ Pump ☐

Color: No ☒ Yes ☐ Describe: _____
 Sheen: No ☒ Yes ☐ Describe: _____
 Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol (gallons)	pH	Temp (°C)	E.C. (μS/cm)
1:16 PM	started purging well			
1:18 PM	2	6.51	16.3	1288
1:20 PM	6	6.56	16.9	1327
1:22 PM	10	6.42	17.1	1482
1:25 PM	14	6.49	16.9	1492
Samples 4:28 PM				



Well No.: PW-10
 Casing Diameter: 2 inches
 Depth of Well: 24.65 feet
 Top of Casing Elevation: 98.95 feet
 Depth to Groundwater: 3.95 feet
 Groundwater Elevation: 95.00 feet
 Water Column Height: 26.70 feet
 Purged Volume: 10 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 15, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☒ Pump ☐

Sampling Method: Bailer ☐ Pump ☐

Color: No ☐ Yes ☐ Describe: _____

Sheen: No ☒ Yes ☐ Describe: _____

Odor: No ☒ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp (°C)	E.C. (uS/cm)
	(gallons)			
1:07 Start Sampling				
1:04 PM	2	6.27	15.7	701
1:07 PM		6.25	15.6	677
1:11 PM	10	6.22	16.0	666
1:15 PM Sample				



Well No.: MW-11
 Casing Diameter: 2 inches
 Depth of Well: 24.50 feet
 Top of Casing Elevation: 98.17 feet
 Depth to Groundwater: 7.60 feet
 Groundwater Elevation: 90.57 feet
 Water Column Height: 16.90 feet
 Purged Volume: 13 gallons

Project No.: 2871
 Address: 3705 Gravenstein Hwy, South
 Sebastopol, CA
 Date: February 15, 2006
 Sampler: Mehran Nowroozi
 Tony Perini

Purging Method: Bailer ☒ Pump ☐

Sampling Method: Bailer ☐ Pump ☐

Color: No ☐ Yes ☐ Describe: _____

Sheen: No ☐ Yes ☐ Describe: _____

Odor: No ☐ Yes ☐ Describe: _____

Field Measurements:

Time	Vol	pH	Temp	E.C.
	(gallons)		(°C)	(µS/cm)
12:30 Start Purging				
12:31 pm	1	6.71	15.2	717
12:34 pm	4	6.72	15.7	723
12:38 pm	7	6.69	15.7	707
12:41 pm	10	6.49	16.1	766
12:43 pm	13	6.49	16.2	733
12:45 pm Sampled				

Appendix C

Chain of Custody Form and Laboratory Report
for the
First Quarter 2006 Monitoring Event



851 West Midway Ave. Suite 201
Alameda, CA 94501

Pacific Analytical Laboratory

Phone (510) 864-0364

01 March 2006

Mansour Sepehr
SOMA Environmental Engineering Inc.
6620 Owens Drive, Suite A
Pleasanton, CA 94588

RE: 3705 Gravenstein Hwy, Sebastopol

Work Order Number: 6020015

This Laboratory report has been reviewed for technical correctness and completeness. This entire report was reviewed and approved by the Laboratory Director or the Director's designee, as verified by the following signature.

Sincerely,

A handwritten signature in black ink, appearing to read "Maiid Akhavan", with a long horizontal flourish extending to the right.

Maiid Akhavan

Laboratory Director

CHAIN OF CUSTODY FORM

Page 1 of 1

PAL Pacific Analytical Laboratory
851 West Midway Ave., Suite 201B
Alameda, CA 94501
510-864-0364 Telephone
510-864-0365 Fax

PAL
Login# 6020015

Project No: 2871				Sampler: <i>Tony Perini / Mehran Nowroozi</i>				Analyses/Method											
Project Name: 3705 Gravenstein Hwy. S. Sebastopol				Report To: Tony Perini				<div style="display: flex; flex-direction: column; align-items: center;"> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">MIBE 8260B</div> <div style="writing-mode: vertical-rl; transform: rotate(180deg);">Gasoline Oxygenates & Lead Scavengers</div> </div>											
				Company: SOMA Environmental Engineering, Inc.															
Turnaround Time: Standard				Tel: 925-734-6400 Fax: 925-734-6401															
		Sampling Date/Time		Matrix			# of Containers	Preservatives											
Lab No.	Sample ID	Date	Time	Soil	Water	Waste		HCL	H ₂ SO ₄	HNO ₃	ICE	Field Notes							
	MW-1	2/16/06	1:10 PM		X		3 VOAS	X			X	<i>Grab sample</i> <div style="text-align: center;">↓</div>							
	MW-2	2/16/06	12:50 PM		X		3 VOAS	X			X								
	MW-3	2/16/06	11:20 AM		X		3 VOAS	X			X								
	MW-4	2/16/06	1:30 PM		X		3 VOAS	X			X								
	MW-5	2/16/06	11 AM		X		3 VOAS	X			X								
	MW-6	2/15/06	3:07 PM		X		3 VOAS	X			X								
	MW-7	2/15/06	2:40 PM		X		3 VOAS	X			X								
	MW-8	2/15/06	2:02 PM		X		3 VOAS	X			X								
	MW-9	2/15/06	1:28 PM		X		3 VOAS	X			X								
	MW-10	2/15/06	1:15 PM		X		3 VOAS	X			X								
	MW-11	2/15/06	12:45 PM		X		3 VOAS	X			X								
Sampler Remarks:				Relinquished by:				Date/Time:				Received by:				Date/Time:			
EDF Output Required TDA only on well MW-8 MtBE on all wells				<i>Tony Perini</i>				2/16/06 3:45 PM				<i>James Zingis</i>				2/16/06 3:45 PM			



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Project: 3705 Gravenstein Hwy, Sebastopol
Project Number: 2871
Project Manager: Mansour Sepehr

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01-Mar-06 14:18

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	6020015-01	Water	16-Feb-06 13:10	16-Feb-06 16:31
MW-2	6020015-02	Water	16-Feb-06 12:50	16-Feb-06 16:31
MW-3	6020015-03	Water	16-Feb-06 11:20	16-Feb-06 16:31
MW-4	6020015-04	Water	16-Feb-06 13:30	16-Feb-06 16:31
MW-5	6020015-05	Water	16-Feb-06 11:00	16-Feb-06 16:31
MW-6	6020015-06	Water	15-Feb-06 15:07	16-Feb-06 16:31
MW-7	6020015-07	Water	15-Feb-06 15:40	16-Feb-06 16:31
MW-8	6020015-08	Water	15-Feb-06 15:02	16-Feb-06 16:31
MW-9	6020015-09	Water	15-Feb-06 13:28	16-Feb-06 16:31
MW-10	6020015-10	Water	15-Feb-06 13:15	16-Feb-06 16:31
MW-11	6020015-11	Water	15-Feb-06 12:45	16-Feb-06 16:31



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Volatile Organic Compounds by EPA Method 8260B
Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (6020015-01) Water Sampled: 16-Feb-06 13:10 Received: 16-Feb-06 16:31									
MTBE	ND	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		101 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		94.0 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		97.8 %	0-200		"	"	"	"	
MW-2 (6020015-02) Water Sampled: 16-Feb-06 12:50 Received: 16-Feb-06 16:31									
MTBE	2.53	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		100 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		92.8 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		96.4 %	0-200		"	"	"	"	
MW-3 (6020015-03) Water Sampled: 16-Feb-06 11:20 Received: 16-Feb-06 16:31									
MTBE	0.860	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		101 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		94.2 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		97.4 %	0-200		"	"	"	"	
MW-4 (6020015-04) Water Sampled: 16-Feb-06 13:30 Received: 16-Feb-06 16:31									
MTBE	ND	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		104 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		95.6 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		95.0 %	0-200		"	"	"	"	
MW-5 (6020015-05) Water Sampled: 16-Feb-06 11:00 Received: 16-Feb-06 16:31									
MTBE	ND	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		101 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		94.4 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		96.0 %	0-200		"	"	"	"	



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Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (6020015-06) Water Sampled: 15-Feb-06 15:07 Received: 16-Feb-06 16:31									
MTBE	ND	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		101 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		93.4 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		96.6 %	0-200		"	"	"	"	
MW-7 (6020015-07) Water Sampled: 15-Feb-06 15:40 Received: 16-Feb-06 16:31									
MTBE	0.750	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	8260B	
Surrogate: 4-Bromofluorobenzene		102 %	0-200		"	"	"	"	
Surrogate: Dibromofluoromethane		95.2 %	0-200		"	"	"	"	
Surrogate: Perdeuterotoluene		95.6 %	0-200		"	"	"	"	
MW-8 (6020015-08) Water Sampled: 15-Feb-06 15:02 Received: 16-Feb-06 16:31									
MTBE	31.0	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-Dibromoethan	ND	0.500	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.8 %	70-130		"	"	"	"	
Surrogate: Dibromofluoromethane		102 %	70-130		"	"	"	"	
Surrogate: Perdeuterotoluene		94.2 %	70-130		"	"	"	"	
MW-9 (6020015-09) Water Sampled: 15-Feb-06 13:28 Received: 16-Feb-06 16:31									
MTBE	0.550	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-Dibromoethan	ND	0.500	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
Surrogate: 4-Bromofluorobenzene		95.4 %	70-130		"	"	"	"	
Surrogate: Dibromofluoromethane		104 %	70-130		"	"	"	"	
Surrogate: Perdeuterotoluene		95.6 %	70-130		"	"	"	"	

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The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



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Volatile Organic Compounds by EPA Method 8260B

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-10 (6020015-10) Water Sampled: 15-Feb-06 13:15 Received: 16-Feb-06 16:31									
MTBE	ND	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-Dibromoethan	ND	0.500	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		95.2 %	70-130		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		103 %	70-130		"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		96.0 %	70-130		"	"	"	"	
MW-11 (6020015-11) Water Sampled: 15-Feb-06 12:45 Received: 16-Feb-06 16:31									
MTBE	ND	0.500	ug/l	1	BB62401	16-Feb-06	22-Feb-06	EPA 8260B	
DIPE	ND	0.500	"	"	"	"	"	"	
ETBE	ND	0.500	"	"	"	"	"	"	
TAME	ND	2.00	"	"	"	"	"	"	
TBA	ND	10.0	"	"	"	"	"	"	
1,2-Dibromoethan	ND	0.500	"	"	"	"	"	"	
1,2-dichloroethane	ND	0.500	"	"	"	"	"	"	
<i>Surrogate: 4-Bromofluorobenzene</i>		97.0 %	70-130		"	"	"	"	
<i>Surrogate: Dibromofluoromethane</i>		103 %	70-130		"	"	"	"	
<i>Surrogate: Perdeuterotoluene</i>		94.8 %	70-130		"	"	"	"	



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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Pacific Analytical Laboratory

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch BB62401 - EPA 5030 Water MS

Blank (BB62401-BLK1)

Prepared & Analyzed: 24-Feb-06

Surrogate: 4-Bromofluorobenzene	49.3		ug/l	50.0		98.6	70-130		
Surrogate: Dibromofluoromethane	49.4		"	50.0		98.8	70-130		
Surrogate: Perdeuterotoluene	47.1		"	50.0		94.2	70-130		
MTBE	ND	0.500	"						
DIPE	ND	0.500	"						
ETBE	ND	0.500	"						
TAME	ND	2.00	"						
TBA	ND	10.0	"						
1,2-Dibromoethan	ND	0.500	"						
1,2-dichloroethane	ND	0.500	"						

LCS (BB62401-BS1)

Prepared & Analyzed: 24-Feb-06

Surrogate: 4-Bromofluorobenzene	48.6		ug/l	50.0		97.2	70-130		
Surrogate: Dibromofluoromethane	48.3		"	50.0		96.6	70-130		
Surrogate: Perdeuterotoluene	46.7		"	50.0		93.4	70-130		
MTBE	111	0.500	"	100		111	70-130		
ETBE	95.5	0.500	"	100		95.5	70-130		
TBA	391	10.0	"	500		78.2	70-130		

LCS Dup (BB62401-BSD1)

Prepared & Analyzed: 24-Feb-06

Surrogate: 4-Bromofluorobenzene	48.7		ug/l	50.0		97.4	70-130		
Surrogate: Dibromofluoromethane	47.2		"	50.0		94.4	70-130		
Surrogate: Perdeuterotoluene	48.0		"	50.0		96.0	70-130		
MTBE	118	0.500	"	100		118	70-130	6.11	20
ETBE	102	0.500	"	100		102	70-130	6.58	20
TBA	423	10.0	"	500		84.6	70-130	7.86	20



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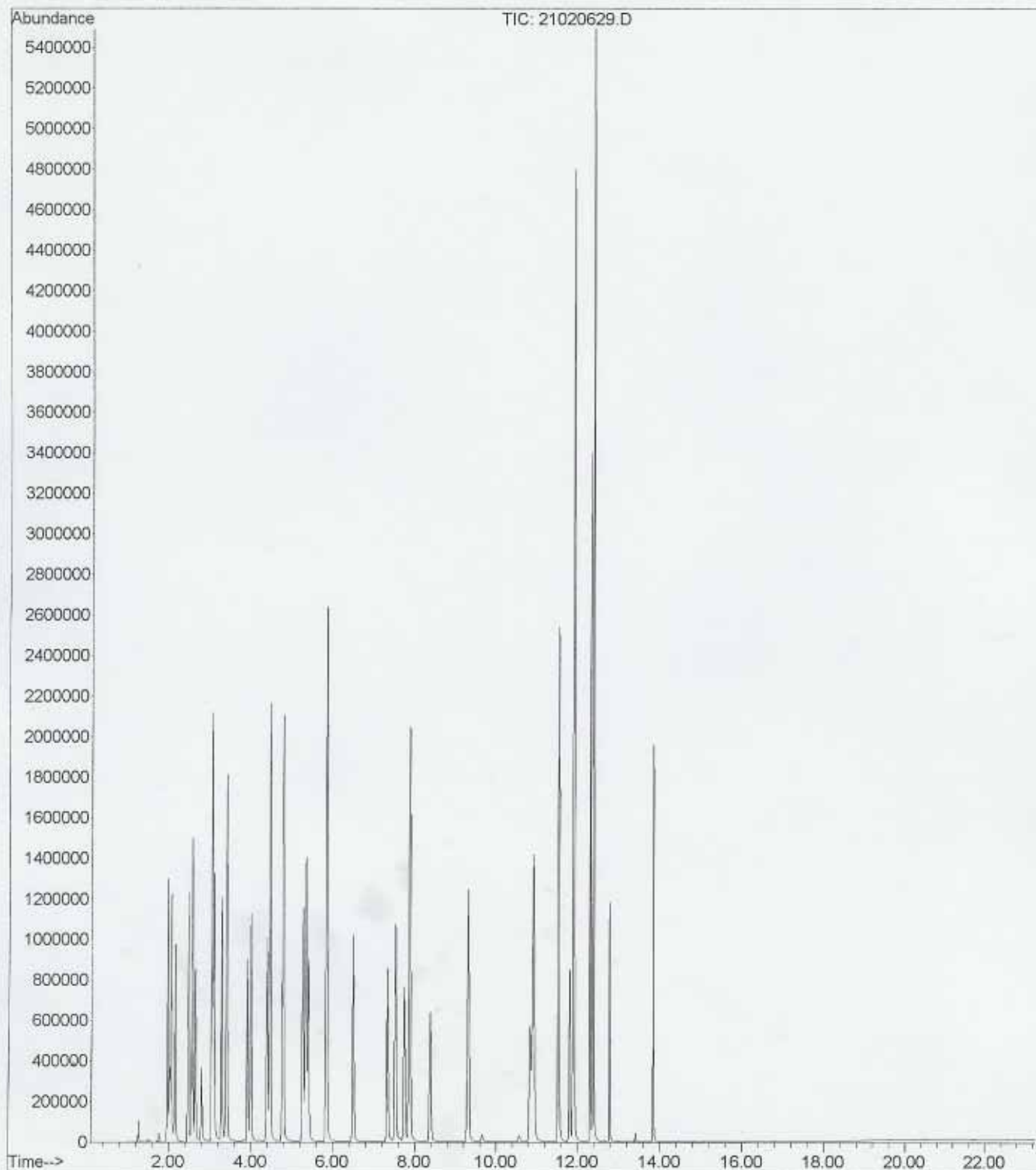
Notes and Definitions

DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

File :C:\MSDChem\1\DATA\2006-Feb-22-1217.b\220020601.D
Operator :
Acquired : 22 Feb 2006 12:35 pm using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB62401-BLK1
Misc Info :
Vial Number: 1



File :C:\MSDCHEM\1\DATA\2006-Feb-21-0924.b\21020629.D
Operator :
Acquired : 22 Feb 2006 12:08 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB62401-BS1@voc
Misc Info :
Vial Number: 29



File : C:\MSDCHEM\1\DATA\2006-Feb-21-0924.b\21020630.D
Operator :
Acquired : 22 Feb 2006 12:39 am using AcqMethod OXY21506.M
Instrument : PAL GCMS
Sample Name: BB62401-BS1@gas
Misc Info :
Vial Number: 30

